MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2022/2023

DEC5014 – MICROECONOMICS

(All sections/Groups)

4 OCTOBER 2023
9.00 A.M – 11.00 A.M
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 12 pages with 2 sections.
2. Attempt **ALL** questions in Section A and Section B. The distribution of the marks for each question is given.
3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.

SECTION A: MULTIPLE CHOICE QUESTIONS (40 MARKS)

1. When Apple, the producer for iPhone 14, increases the price of its smartphones, many consumers decided to buy the new Samsung Galaxy Z Flip as it is cheaper. This scenario indicates that they are _____ with each other.
   A. substitute
   B. complement
   C. unrelated
   D. supplier

2. If the price of movie tickets decreases and people start going to the movies more frequent, this behavior is in line with _____.
   A. the law of demand
   B. the law of supply
   C. the law of equilibrium
   D. the law of substitutes

3. Due to favorable weather conditions, a large quantity of strawberries is produced in the market. This situation reflects a change in _____.
   A. consumer preferences
   B. technology
   C. producer expectations
   D. supply in the market

4. In a market, when the quantity demanded equals the quantity supplied, it signifies _____.
   A. a shortage
   B. an excess supply
   C. equilibrium
   D. an economic crisis

5. A sudden surge in demand for electric vehicles (EVs) has led to an increase in the price of electric car batteries. In response to this change, EV manufacturers are ramping up their battery production to meet the market demand.

   What does this situation relate to?
   A. The law of attraction.
   B. Supply for complementary goods.
   C. The law of equilibrium.
   D. The law of scarcity.

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6. If consuming an additional slice of pizza adds less satisfaction compared to the previous slices, this decrease in added satisfaction represents _____.
   A. Total utility
   B. Marginal utility
   C. Opportunity cost
   D. Diminishing returns

7. A graphical representation of a consumer's preferences for different combinations of goods is known as a:
   A. Budget line
   B. Indifference curve
   C. Demand curve
   D. Supply curve

Question 8 to question 12 refers to Table 1 below.

Consider the following table, which shows prices and quantities of two goods, Apples and Banana.

Goods	Price	Quantity
Apples	RM1.50	20
Banana	RM1.00	30

Table 1

8. If a consumer spends their entire RM30 budget on apples, how many units of apples can they purchase?
   A. 10
   B. 20
   C. 30
   D. 40

9. What is the consumer's total expenditure if they buy 10 units of apples and 25 units of bananas?
   A. RM40.00
   B. RM45.00
   C. RM50.00
   D. RM55.00

Continued...

10. If the consumer's budget is RM50.00 and they buy 20 units of bananas, how many units of apples can they afford?
    A. 10
    B. 15
    C. 20
    D. 25

11. A consumer has a budget of RM40.00 to spend on apples and bananas. They are considering two options:

Option A, where they buy 12 units of apples and 18 units of bananas.
Option B, where they buy 20 units of apples and 10 units of bananas.

    Which of the following is the **CORRECT** statement?
    A. Option A is more cost-effective because it maximizes the quantity of goods purchased.
    B. Option B is more cost-effective because it allows the consumer to buy equal quantities of Apples and Bananas.
    C. Option A is maximising utility because it stays within the budget limit of RM40.00.
    D. Option B is maximising utility because it uses the entire budget of RM40.00.

12. The consumer decides to buy 10 units of apples and 15 units of bananas. What percentage of their budget is spent if their income is RM60?
    A. 45%
    B. 50%
    C. 60%
    D. 75%

13. An indifference curve that is convex (curved inward) reflects the concept of _____.
    A. perfect substitutes
    B. perfect complements
    C. diminishing marginal utility
    D. marginal rate of substitution

Continued...

14. Steven, a college student, is deciding how to allocate his limited budget between pizza and soda to maximize his utility. The marginal utility for Steven's consumption of the last slice of pizza is 20, and the marginal utility of the last can of soda is 5. If the price of pizza is RM2 and the price of soda is RM1, which of the following statements is **TRUE** about Steven's consumption choices?
    A. Steven should consume more pizza and less soda to maximize his utility, considering the higher marginal utility per unit of money spent on pizza.
    B. Steven should consume more soda and less pizza to maximize his utility, as it provides him with higher marginal utility.
    C. Steven should consume the same amount of pizza and soda to maximize his utility, since the marginal utility for both goods is balanced.
    D. It is impossible to determine how Steven should adjust his consumption to maximize his utility without more information about his total budget and preferences.

15. As John's income grows, he finds himself with a larger budget to allocate between two goods: hiking gear and books. His marginal utility for hiking gear is 20 units, while his marginal utility for books is 10 units. Considering this information, what is likely to happen to John's budget line?
    A. It will shift outward, reflecting his increased purchasing power.
    B. It will shift inward, indicating a decrease in his purchasing ability.
    C. It will remain unchanged but become steeper due to the change in marginal utilities.
    D. It will not shift, as it is solely determined by the relative prices of the goods.

16. In a perfectly competitive market, if the price of a product is RM10 and the marginal cost of producing one unit is RM8, what would a profit-maximizing firm do?
    A. Produce more units.
    B. Produce fewer units.
    C. Shut down in the short run.
    D. Continue producing the current quantity.

17. Which of the following explains how the entry and exit of firms in a perfectly competitive market helps achieve long-run equilibrium?
    A. Firms exit when making profits and enter when making losses.
    B. Firms exit when making losses and enter when making profits.
    C. Firms only enter when making profits.
    D. Firms only exit when making losses.

Continued...

18. Which of the following curves represents the short-run supply curve of a firm in a perfectly competitive market?
    A. Marginal cost curve above the average variable cost curve.
    B. Average total cost curve above the average variable cost curve.
    C. Marginal cost curve above the average total cost curve.
    D. Average variable cost curve above the marginal cost curve.

19. Which of the following characteristics is typical of a perfectly competitive market?
    A. Few sellers with differentiated products.
    B. Substantial barriers to entry.
    C. Control over market prices by individual firms.
    D. Homogeneous products and many buyers and sellers.

Question 20 until question 23 refers to Table 2.

Consider the following table, which provides information about a perfectly competitive market.

Quantity	Total Cost (RM)	Total Revenue (RM)
0	10	0
1	15	12
2	18	24
3	24	36
4	33	48
5	45	60

Table 2

20. What is the profit or loss when producing 3 units of output in this perfectly competitive market?
    A. Profit of RM12
    B. Loss of RM12
    C. Profit of RM0
    D. Loss of RM24

21. What is the profit maximizing quantity for this firm?
    A. 2
    B. 3
    C. 4
    D. 5

Continued...

22. Imagine you live in a small town where there's only one store that sells a special type of ice cream called "Fantasy Swirl." Even though there is no restrictions, this store is the sole provider of this unique ice cream in the entire town. Which of the following statements **BEST** describes the situation in terms of market structure?
    A. The town has multiple stores selling the same type of ice cream.
    B. The store must adjust its prices based on what other stores are charging.
    C. New ice cream stores can't easily open up in the town and compete with the existing stores.
    D. The store has a strong control over the ice cream market in the town.

23. Consider a town where several coffee shops operate, each offering its own distinct coffee blends. These shops, while having somewhat similar coffee, aim to set themselves apart through unique branding and specific flavors. Customers exhibit preferences for particular shops, but they remain open to exploring new options as well. Which description aligns **BEST** with the market structure of these coffee shops?
    A. A solitary coffee shop dominates the town by providing an exclusive coffee blend.
    B. Coffee shops are compelled to establish identical prices to attract customers.
    C. Aspiring coffee shops encounter considerable obstacles when attempting to enter this market.
    D. Coffee shops engage in competition by presenting varied products, granting them partial influence over pricing and quantities sold.

24. In the context of monopolistic competition, the term "mark-up" refers to _____.
    A. The difference between the cost of production and the market price.
    B. The price that all firms in the market agree upon to ensure fair competition.
    C. The amount by which a firm's price exceeds its marginal cost.
    D. The practice of charging the same price as competitors for identical products.

25. City Ville is a town with several bakeries, each specializing in crafting a range of unique cakes with distinct flavors and designs. Despite possessing the capability to produce more cakes, many of these bakeries choose to operate below their maximum production capacity. Which economic principle best clarifies this phenomenon within the context of monopolistic competition?
    A. Achieving economies of scale.
    B. Implementing price discrimination.
    C. Experiencing excess capacity.
    D. Engaging in collusive pricing.

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Question 26 until question 30 refers to Table 3.

		INFRA	
		High Price	**Low Price**
CMI	**High Price**	10 / 10	15 / 5
	Low Price	5 / 15	8 / 8

Table 3

Two firms, CMI and INFRA, have the option to either set a high price or a low price for their products. The numbers in the matrix represent the profit values for each firm based on their pricing decisions.

26. If CMI sets a low price and INFRA sets a high price, what is the total profit earned by both firms?
    A. RM15
    B. RM20
    C. RM13
    D. RM18

27. Based on the payoff matrix, what is the outcome if CMI sets a high price and INFRA sets a low price?
    A. CMI earns RM10, and INFRA earns RM10.
    B. CMI earns RM5, and INFRA earns RM15.
    C. CMI earns RM15, and INFRA earns RM5.
    D. CMI earns RM8, and INFRA earns RM8.

Continued...

28. What outcome would result in the lowest total combined profit for both CMI and INFRA?
    A. CMI setting a high price and INFRA setting a low price.
    B. Both firms setting a low price.
    C. Both firms setting a high price.
    D. The specific outcome cannot be determined from the given matrix.

29. Based on the payoff matrix, which term **BEST** describes the situation where both firms set a high price and earn RM10 profit each?
    A. Nash equilibrium.
    B. Collusion.
    C. Price differentiation.
    D. Excess capacity

30. What does the provided payoff matrix illustrate about the behavior of firms in an oligopoly market?
    A. Each firm is entirely independent and doesn't consider the actions of others.
    B. Firms in an oligopoly always collude to maximize joint profits.
    C. Firms' profits are interdependent, influenced by their pricing decisions and their competitor's decisions.
    D. The profit of one firm is inversely proportional to the profit of the other firm.

31. What does the individual labor supply curve illustrate?
    A. The total amount of labor demanded by all firms in the market.
    B. The relationship between the wage rate and the quantity of labor an individual is willing to supply.
    C. The relationship between the wage rate and the quantity of labor demanded by firms.
    D. The equilibrium wage rate in the labor market.

32. The substitution effect of a wage increase on individual labor supply refers to _____.
    A. The tendency of workers to substitute leisure for work when wages rise.
    B. The reduction in the quantity of labor supplied due to an increase in wage.
    C. The increase in labor demand resulting from higher wages.
    D. The impact of changes in wage rates on the overall cost of production for firms.

Continued...

33. If an increase in wage rates leads a worker to feel wealthier and choose to work less, this is an example of _____.
    A. Substitution effect of labor.
    B. Income effect of labor.
    C. Demand for labor.
    D. Supply for labor.

34. The demand for labor by firms is derived from _____.
    A. The number of workers available in the market.
    B. The wage rates set by the government.
    C. The value or marginal product of labor.
    D. The aggregate supply of labor.

35. Imagine you are an economist studying the labor market. The supply of labor is influenced by _____.
    A. Government regulations on wage rates.
    B. The overall profitability of individual firms.
    C. The collective bargaining power of labor unions.
    D. The personal decisions and preferences of workers.

36. Consider a scenario where a factory is hiring additional workers. The concept that quantifies the extra revenue generated by hiring one more worker is known as _____.
    A. Labor market equilibrium.
    B. Total factor productivity.
    C. Value or marginal product of labor.
    D. Wage rate elasticity.

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Question 37 until 40 are based on Table 4.

The Production Function			
Labor (workers per day)	Output (unit per day)		
	Plant 1	**Plant 2**	**Plant 3**
0	0	0	0
1	15	25	40
2	30	50	80
3	45	75	120
4	60	100	160
5	75	125	200
Machines (number)	**1**	**2**	**3**

Table 4

37. What is the total output for Plant 2 when 3 workers are employed per day?
    A. 50 unit per day.
    B. 75 unit per day.
    C. 125 unit per day.
    D. 200 unit per day.

38. How many workers per day does Plant 1 achieve an output of 60 unit per day?
    A. 2 workers.
    B. 3 workers.
    C. 4 workers.
    D. 5 workers

39. If 3 workers hired in Plant 3, what will be the marginal product in unit per day?
    A. 40 unit per day.
    B. 100 unit per day.
    C. 120 unit per day.
    D. 160 unit per day.

40. When 4 workers are employed each day, which plant exhibits the highest output in unit per day?
    A. Plant 1.
    B. Plant 2.
    C. Plant 3.
    D. All plants.

[TOTAL: 40 MARKS]

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SECTION B: STRUCTURED QUESTIONS (60 MARKS)
Answer ALL questions. Answers should be written on the answer booklet provided.

QUESTION 1

(a) Define Microeconomics and Macroeconomics. Provide **ONE** example for each. (6 marks)

(b) Briefly explain the **FOUR (4)** factors of production used in the production process. (12 marks)

(c) Define production possibility frontier (PPF). (2 marks)

(Total: 20 marks)

QUESTION 2

(a) The heavy rainfall in monsoon season destroys the strawberry crop at Cameron Highland, therefore the price of strawberry rises from RM4 to RM6 per box, and the quantity demanded decreases from 1,000 to 600 boxes per week.

(i) Calculate the price elasticity of demand. (4 marks)
(You are required to show the formula and working calculations)

(ii) Explain the price elasticity of demand for strawberries from answer (a)(i). (2 marks)

(b) A change in price does not always lead to the same proportionate change in demand. There are **THREE (3)** factors which affect the price elasticity of demand (PED). List and explain. (6 marks)

(c) A manufacturer of smartphones reduces the price of their latest model by 20%, which leads to an increase in the quantity supplied by 35%.

(i) Calculate the price elasticity of supply (PES) for these smartphones. Based on the calculated elasticity value, is the supply of these smartphones considered elastic, inelastic, or unit elastic? (4 marks)
(You are required to show the formula and working calculations)

(ii) Explain how the type of elasticity in (c)(i) affects the production of goods and services? (4 marks)

(Total: 20 marks)

Continued...

QUESTION 3

(a) Briefly explain why the demand for a firm under perfect competition is perfectly elastic. (2 marks)

(b) Ah Keong's farm produces and sells corn. The market for corn is perfectly competitive. The market price for corn is RM3 per kg. The relationship between the farm's output and total cost is shown in Table 5 below. (*You are required to re-write the table below in your answer script.*)

Quantity (kg per day)	Total cost (per day)	Marginal Cost (MC)	Total Revenue (TR)
0	500	-	-
150	713		
200	800		
250	838		
300	900		
350	1 ,063		

Table 5

(i) Calculate the Marginal Cost (MC) and Total Revenue (TR) for production of corn. (10 marks)

(ii) If Ah Keong produces corn at 250 kg, how much is his total cost and his economic profit or economic loss? (2 marks)

(c) Define the following and provide **ONE** example for each.

(i) Single-price monopoly market structure. (3 marks)

(ii) Price discrimination in monopoly market structure. (3 marks)

(Total: 20 marks)

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